

Amendments to the Claims:

Please cancel Claims 1, 13, 19, and 25 without prejudice.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled)

2. (Currently Amended) A display unit as described in Claim [1] 30 and further comprising:

a contrast adjustment circuit for adjusting voltage levels supplied to said first plurality of row drivers and column drivers to adjust the contrast of said image of said passive matrix, and wherein said contrast adjustment circuit is also operable to adjust said ~~common~~ threshold signal to match the contrast of said ~~fixed-pixel~~ border to that of said passive matrix.

3. (Currently Amended) A display unit as described in Claim [1] 30 wherein said image has a white background and a black foreground and wherein said ~~fixed-pixel~~ border is driven to said on state to be white to match said background.

4. (Currently Amended) A display unit as described in Claim [1] 30 wherein said passive matrix is negative display mode liquid crystal display technology.

5. (Original) A display unit as described in Claim 4 wherein said liquid crystal display technology is supertwisted nematic.

6. (Currently Amended) A display unit as described in Claim [1] 30 wherein said passive matrix is electronic ink technology.

7. (Currently Amended) A display unit as described in Claim [1] 30 wherein said passive matrix is microelectromechanical system (MEMS) technology.

8. (Currently Amended) A display unit as described in Claim [1] 30 and further comprising a drive circuit responsive to a single control signal for generating said ~~common~~ threshold signal.

9. (Currently Amended) A display unit as described in Claim [1] 30 wherein each pixel of said passive matrix comprises: a red subpixel; a green subpixel; and a blue subpixel, said subpixels of a matrix pixel sharing a common row and spanning three columns.

10. (Currently Amended) A display unit as described in Claim 9 wherein each pixel of said ~~fixed-pixel~~ border comprises: a red subpixel; a green subpixel; and a blue subpixel,

11. (Canceled)

12. (Currently Amended) A display unit as described in Claim [1] 30 wherein said passive matrix comprises 160 rows and 160 columns of discrete pixels.

13. (Canceled)

14. (Currently Amended) A display unit as described in Claim [13] 31 wherein said image has a white background and a black foreground and wherein said ~~fixed-pixel~~ border is driven to said on state to be white to match said background.

15. (Currently Amended) A display unit as described in Claim [13] 31 wherein said passive matrix is supertwisted nematic liquid crystal display technology.

16. (Currently Amended) A display unit as described in Claim [13] 31 and further comprising a drive circuit responsive to a single control signal for generating said ~~common~~ threshold signal.

17. (Canceled)

18. (Currently Amended) A display unit as described in Claim [13] 31 wherein said passive matrix comprises 160 rows and 160 columns of discrete pixels.

19. (Canceled)

20. (Currently Amended) A portable electronic device as described in Claim [19] 32 and further comprising:

a contrast adjustment circuit for adjusting voltage levels supplied to said first plurality of row drivers and column drivers to adjust the contrast of said image of said passive matrix, and wherein said contrast adjustment circuit is also operable to adjust said ~~common~~ threshold signal to match the contrast of said ~~fixed-pixel~~ border to that of said passive matrix.

21. (Currently Amended) A portable electronic device as described in Claim [19] 32 wherein said image has a white background and a black foreground and wherein said ~~fixed-pixel~~ border is driven to said on state to be white to match said background.

22. (Currently Amended) A portable electronic device as described in Claim [19] 32 wherein said passive matrix is negative mode supertwisted nematic liquid crystal display technology.

23. (Currently Amended) A portable electronic device as described in Claim [19] 32 and further comprising a drive circuit responsive to a single control signal for generating said ~~common~~ threshold signal.

24. (Currently Amended) A portable electronic device as described in Claim [19] 32 ~~wherein said predetermined width is two pixels and~~ wherein said passive matrix comprises 160 rows and 160 columns of discrete pixels.

25-27. (Canceled)

28. (Currently Amended) A display unit of Claim [25] 33 and further comprising:

a contrast adjustment circuit for adjusting voltage levels supplied to said first plurality of row drivers and column drivers to adjust the contrast of said image of said passive matrix, and wherein said contrast adjustment circuit is also operable to adjust said ~~common~~ threshold signal to match the contrast of said ~~pixel~~ border to that of said passive matrix.

29. (Currently Amended) A display unit of Claim [25] 33 wherein said image has a white background and a black foreground and wherein said pixel border is driven to said on state to be white to match said background.

30. (New) A display unit comprising:

- a frame buffer memory operable to store image information;
- a first plurality of row drivers and column drivers which depend on said frame buffer memory;
- a passive matrix of independently controllable pixels comprising rows and columns of discrete pixels, said passive matrix operable to generate an image in response to electrical signals driven from said first plurality of row drivers and column drivers solely coupled to pixels of said passive matrix, wherein said image is representative of said image information of said frame buffer memory;
- a second plurality of row drivers and column drivers which operate independent of said frame buffer memory; and
- a border surrounding said passive matrix and comprising a fixed number of pixels arranged in rows and columns, wherein said border includes a fixed width surrounding said passive matrix, wherein each pixel of said border is uniformly controllable between an on state and an off state by a threshold signal applied to each pixel of said border, wherein said threshold signal is based on voltages driven by said second plurality of row drivers and column drivers solely coupled to said pixels of said border.

31. (New) A display unit comprising:

a frame buffer memory operable to store image information;

a first plurality of row drivers and column drivers which depend on said frame buffer memory;

a passive matrix of independently controllable pixels comprising rows and columns of discrete pixels, said passive matrix operable to generate an image in response to electrical signals driven from said first plurality of row drivers and column drivers solely coupled to pixels of said passive matrix, wherein said image is representative of said image information of said frame buffer memory;

a second plurality of row drivers and column drivers which operate independent of said frame buffer memory;

a border surrounding said passive matrix and comprising a fixed number of pixels arranged in rows and columns, wherein said border includes a fixed width surrounding said passive matrix, wherein each pixel of said border is uniformly controllable between an on state and an off state by a threshold signal applied to each pixel of said border, wherein said threshold signal is based on voltages driven by said second plurality of row drivers and column drivers solely coupled to said pixels of said border; and

a contrast adjustment circuit for adjusting voltage levels supplied to said first plurality of row drivers and column drivers to adjust a contrast of said image of said passive matrix, wherein said contrast adjustment circuit is also operable to adjust said threshold signal to match a contrast of said border with said contrast of said passive matrix.

32. (New) A portable electronic device comprising:

a processor couple to a bus;
a memory unit coupled to said bus;
a user input device coupled to said bus; and
a display unit coupled to said bus and comprising:
 a frame buffer memory operable to store image information;
 a first plurality of row drivers and column drivers which depend on
said frame buffer memory;
 a passive matrix of independently controllable pixels comprising
rows and columns of discrete pixels, said passive matrix operable to generate an
image in response to electrical signals driven from said first plurality of row
drivers and column drivers solely coupled to pixels of said passive matrix,
wherein said image is representative of said image information of said frame
buffer memory;
 a second plurality of row drivers and column drivers which operate
independent of said frame buffer memory;
 a border surrounding said passive matrix and comprising a fixed
number of pixels arranged in rows and columns, wherein said border includes a
fixed width surrounding said passive matrix, wherein each pixel of said border is
uniformly controllable between an on state and an off state by a threshold signal
applied to each pixel of said border, wherein said threshold signal is based on
voltages driven by said second plurality of row drivers and column drivers solely
coupled to said pixels of said border.

33. (New) A display unit comprising:

a frame buffer memory operable to store image information;

a first plurality of row drivers and column drivers which depend on said frame buffer memory;

a passive matrix of independently controllable pixels comprising rows and columns of discrete pixels, said passive matrix operable to generate an image in response to electrical signals driven from said first plurality of row drivers and column drivers solely coupled to pixels of said passive matrix, wherein said image is representative of said image information of said frame buffer memory;

a second plurality of row drivers and column drivers which operate independent of said frame buffer memory;

a first threshold voltage driver coupled to and operable to provide a first constant voltage to said second plurality of row drivers;

a second threshold voltage driver coupled to and operable to provide a second constant voltage to said second plurality of column drivers; and

a border surrounding said passive matrix and comprising a plurality of pixels arranged in rows and columns, wherein said border includes a fixed width surrounding said passive matrix, wherein each pixel of said border is uniformly controllable between an on state and an off state by a threshold signal applied to each pixel of said border, wherein said threshold signal is based on said first and second constant voltages driven by said second plurality of row drivers and column drivers solely coupled to said pixels of said border.